

ABSTRACT

A catheter for providing an embolic material at a desired location comprises a flexible tubular member having a proximal end and a distal end, the tubular member including at least one ring of expansible material affixed to its outer surface less than 25 mm from the distal end. The ring preferably comprises a material that expands in volume when in contact with a liquid, such as a hydrogel or hydrogel foam, or in response to an application of heat. The ring is fully expanded after between 10 and 30 minutes of contact with a liquid. The catheter may also include further including a plurality of radioopaque markers spaced along the tubular member at predetermined intervals.